In the Claims

1-17 (canceled).

18 (new). A method for the treatment of functional digestive disorders, comprising administering to a subject in need of such treatment an effective amount of at least one protease inhibitor.

19 (new). The method according to claim 18, wherein the protease inhibitor is an intracolonic protease inhibitor.

20 (new). The method according to claim 18, wherein the protease inhibitor is an inhibitor of serine proteases or an inhibitor of metalloproteases.

21 (new). The method according to claim 18, wherein the protease inhibitor is an inhibitor of serine proteases selected in the group consisting of serpin and derivatives thereof, aprotinin, N-tosyl-L-phenylalanyl chloromethyl ketone, dichloroisocoumarin, nexin-1, AEBSF-HCl, Antipain, benzamidine, leupeptin, TLCK, ovomucoid, phenylmethyl sulfonyl fluoride, PEFABLOC® and soy bean extracts.

22 (new). The method according to claim 18, wherein the protease inhibitor is an metalloprotease inhibitor selected in the group consisting of amastatin, arphamenin, bestatin, diprotin A and phosphoramidon.

23 (new). The method according to claim 18, wherein the protease inhibitor is selected in the group consisting of amprenavir, indinavir, lopinavir, ritonavir, saquinavir, nelfinavir and atazanavir.

24 (new). The method according to claim 18, for controlling paracellular permeability of the intestinal epithelium in subjects with functional intestinal disorders characterized by a state of hyperalgesia.

25 (new). The method according to claim 18, for reducing paracellular permeability of the intestinal epithelium in subjects with functional intestinal disorders characterized by a state of hyperalgesia.

26 (new). The method according to claim 18, for reducing sensitivity to pain in subjects afflicted with or susceptible to functional intestinal disorders characterized by a state of hyperalgesia.

27 (new). The method according to claim 18, for the treatment of functional intestinal disorders (IFD).

28 (new). The method according to claim 18, wherein the functional digestive disorder is an intestinal functional disorder selected in the group consisting of irritable bowel syndrome (IBS), functional abdominal pain without defecation disorder and pain related to food intolerance.

29 (new). The method according to claim 18, wherein the inhibitor is administered by the oral or rectal route.

30 (new). A method for the treatment of hyperalgesia occurring in the context of intestinal pathologies functional digestive disorders, comprising administering to a subject in need of such treatment an effective amount of at least one protease inhibitor.

31 (new). The method according to claim 30, wherein the protease inhibitor is an inhibitor of serine proteases or an inhibitor of metalloproteases.

32 (new). A pharmaceutical composition comprising at least one protease inhibitor and at least one other active agent selected in the group consisting of anticholinergic compounds, prokinetics, antidiarrheals, laxatives, modifiers of motility or visceral sensitivity, in view of a use that is combined, separate or spread out over time.

33 (new). The composition according to claim 32, wherein the protease inhibitor is selected in the group consisting of an inhibitor of serine proteases and an inhibitor of metalloproteases.

34 (new). The composition according to claim 32, wherein said composition is formulated as a capsule or a gelatin capsule which releases its contents by microbial digestion in the colon.